

## ABSTRACT

An ethylene (co)polymer of the present invention is a (co)polymer with excellent moldability and mechanical properties and either an ethylene homopolymer or a

5 copolymer of ethylene and an  $\alpha$ -olefin of 4 to 20 carbon atoms. The (co)polymer has methyl branches measured by  $^{13}\text{C}$ -NMR less than 0.1 in number per 1,000 carbon atoms and  $M_w/M_n$  measured by GPC not lower than 1.8 and lower than 4.5. The (co)polymer is either an ethylene

10 homopolymer or a copolymer of ethylene and an  $\alpha$ -olefin of 3 to 20 carbon atoms. The melt tension (MT) and the swell ratio (SR) satisfy the relation;  $\log(\text{MT}) > 12.9 - 7.15 \times \text{SR}$ ; and the intrinsic viscosity ( $[\eta]$ ) and the melt flow rate (MFR) satisfy the relation;  $[\eta] > 1.85 \times \text{MFR}^{0.192}$  in the case of  $\text{MFR} < 1$  and the relation;  $[\eta] > 1.85 \times \text{MFR}^{-0.213}$  in the case of  $\text{MFR} \geq 1$ . Such an ethylene (co)polymer can be usable for various molding applications and especially suitable for pipes.